



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

JUN 29 2009

REPLY TO THE ATTENTION OF:

E-19J

Robert F. Tally, Jr., Division Administrator  
Federal Highway Administration - Indiana Division  
575 North Pennsylvania St., Room 254  
Indianapolis, IN 46204

Michael W. Reed, Commissioner  
Indiana Department of Transportation  
100 North Senate Ave., Room N642  
Indianapolis, Indiana 46204

**RE: I-69 Evansville to Indianapolis, Tier 2 Draft Environmental Impact  
Statement for Section 2: Oakland City to Washington. CEQ No. 20090150**

Dear Mr. Tally and Mr. Reed:

The U.S. Environmental Protection Agency Region 5 (EPA) reviewed the Federal Highway Administration's (FHWA) I-69 Tier 2 Section 2 Draft Environmental Impact Statement (DEIS), pursuant to Section 102(2)(C) of the National Environmental Policy Act (NEPA), and Section 309 of the Clean Air Act. The purpose of this letter and enclosure is to provide you with the results of our EPA review.

EPA rates the DEIS preferred alternative as LO, Lack of Objections. An explanation of our rating system can be found in the enclosure entitled, "Summary of Rating Definitions and Follow-Up Actions." The DEIS is informative and reflects FHWA and the Indiana Department of Transportation (INDOT) efforts to avoid and minimize impacts to resources of concern in developing the Section 2 DEIS alternatives and identifying the DEIS preferred alternative. We are pleased to see the continuation of the commitment to bridge the Patoka River and Flat Creek, along with their 100-year floodplains, and to mitigate voluntarily at a 3:1 ratio for the loss of upland forest.

We have not identified any potential impacts requiring substantive changes to the proposal for Section 2. However, EPA requests that the Tier 2 Section 2 Final EIS (FEIS) identify the upland forest mitigation sites that will be used to mitigate for Section 2 upland forest impacts. We also request that the FEIS identify and discuss the current status of the Umbrella Mitigation Bank instrument currently being developed for Section 2 and Section 3, and provide an update on INDOT's efforts to identify the additional wetland and stream mitigation sites that the DEIS discloses will be necessary to compensate for these Section 2 impacts. Our enclosed detailed comments focus on

clarification, corrections and suggestions for additional information to include in the FEIS. We also make recommendations for additional mitigation measures for INDOT to consider incorporating into this proposal to further protect and enhance the environment. Our detailed comments focus on air quality, wetlands and streams, floodplains, and forests.

We appreciate that the Section 2 DEIS identifies that the FEIS will include a running tally of the impacts to date of the overall I-69 Indianapolis to Evansville project. We request the Section 2 FEIS and the other Tier 2 EISs include a detailed explanation of the tracking system that INDOT is using to insure that the overall I-69 project's impacts are identified and all Tier 1 and Tier 2 NEPA mitigation measures as well as regulatory mitigation requirements are successfully implemented.

Thank you for the opportunity to review and comment on the DEIS. If you have any questions about U.S. EPA's comments, please contact Virginia Laszewski at 312-886-7501 or email her at [laszewski.virginia@epa.gov](mailto:laszewski.virginia@epa.gov). We look forward to reviewing the I-69 Tier 2 FEIS for Section 2.

Sincerely,



Kenneth A. Westlake  
Supervisor  
NEPA Implementation  
Office of Enforcement and Compliance Assurance

Enclosures: 2

cc: U.S. Army Corps of Engineers – Louisville District, Attention: CELRL-OP-F,  
P.O. Box 59, Louisville, KY 40401-0059 (Michael Hasty)  
U.S. Fish and Wildlife Service, Region 3, Bloomington Ecological Services  
Office, 620 S. Walker Street, Bloomington, IN 47403-2121 (Scott Pruitt/  
Andy King)  
Indiana Department of Environmental Management, Office of Water Quality,  
Section 401 Water Quality Certification Program, 100 N. Senate Avenue,  
MC 65-40, Indianapolis, IN 46204-2251 (Jason Randolph, South Area  
Project Manager)  
Indiana Department of Natural Resources, 402 W. Washington St., Rm W264,  
Indianapolis, IN 46204 (Matt Buffington)

**U.S. EPA Comments Concerning the I-69 Evansville to Indianapolis,  
Tier 2 Draft Environmental Impact Statement  
Section 2 – Oakland City to Washington  
CEQ No. 20090150**

**AIR QUALITY**

**Ambient Air Quality Standards:** Section 4.6 - Air Quality, Table 4.6-1 (Page 4-115) lists both the old and new standards for ozone and PM<sub>2.5</sub>. Please note that the lead (Pb) standard has recently been changed to 0.15 ug/m<sup>3</sup>.

Recommendation: Please include both the old (1.5 ug/m<sup>3</sup>) and new (0.15 ug/m<sup>3</sup>) standards for lead (Pb) in Table 4.6-1 in the Tier 2 Section 2 Final EIS (FEIS).

Recommendation: We recommend Section 5.9.2 Regulatory Setting – Conformity Requirements (page 5-151) include a discussion of the new tighter 24-hour PM standard of 35 ug/m<sup>3</sup> in the main body of the text.

**PM<sub>2.5</sub> Hot Spot Analysis:** Section 5.9 Air Quality, 5.9.1 Introduction (page 5-150) states, “Section 2 occupies a portion of Washington Township in Pike County, which is nonattainment for the annual PM 2.5 NAAQS; it will be necessary to conduct a qualitative project level PM<sub>2.5</sub> hot-spot analysis.”

Recommendation: This statement should be changed for the Tier 2 Section 2 FEIS to reflect the March 1, 2007 interagency consultation meeting where EPA, IDEM, FHWA, and INDOT determined that the level of traffic expected from the project did not meet the criteria for a project of air quality concern and thus no hot-spot qualitative analysis is required. Include language similar or the same as that found at the bottom of DEIS page 5-155.

**Clean Air Act Compliance:** The DEIS correctly identifies that the Tier 2 Section 2 EIS preferred alternative must be included in the Evansville MPO and the INDOT transportation plans and demonstrate conformity with the State Implementation Plans for air quality before FHWA will approve the Tier 2 Section 2 FEIS and issue its Record of Decision (ROD).

**Air Quality Mitigation During Construction:** Exposure to diesel exhaust by construction workers and those nearby a construction site can have serious health implications. In order to protect air quality in the project area during construction, we recommend INDOT consider strategies to reduce diesel emissions, such as project construction contracts that require the use of equipment with clean diesel engines and the use of clean diesel fuels, and limits on the length of time equipment is allowed to idle when not in active use (EPA recommends idling not exceed 5 minutes).

Recommendation: The Section 2 FEIS should identify and discuss the impacts to construction workers and nearby residents, schools, etc., from diesel exhaust during project construction. The Section 2 FEIS should discuss the feasibility of utilizing the

type of mitigation discussed above for Section 2 and disclose whether or not INDOT will consider or commit to implementing the above referenced and/or additional strategies, including but not limited to, formalizing INDOT actions for the entire I-69 project by developing and implementing a construction emissions reduction plan as recommended in our June 3, 2009, letter regarding the I-69 Tier 2 Section 3 DEIS.

## **STREAMS AND WETLANDS**

**Wetland and Stream Impacts Trade-offs:** The Section 2 preferred alternative has comparable or fewer impacts to wetlands and streams than do the other alternatives. The preferred alternative in sub-section 9 has made the trade-off of taking more stream area and less wetlands. Overall, the preferred alternative has much lower estimated impacts to wetlands, 27.46 acres versus 49.58 acres for the other alternative, which is desirable. We are pleased that wetland impacts in Tier 2 are less than the 35 acres of wetlands impacts predicted in the Tier 1 EIS process for Section 2. The wetland impact matrix on p. 5-315 is helpful.

**Stream resources:** We are pleased to see the continuation of the commitment to bridge the Patoka River and Flat Creek, along with their 100-year floodplains. Stream resources impacts were updated during the DEIS review period using a more suitable methodology. The 2009 survey had better detection and resulted in considerably higher impacts to streams than first estimated, especially for the smallest water bodies. The relative ranking of the alternative, though, remains the same, with the preferred alternative having about 2,360 linear feet less stream impact than the next closest alternative. However, impacts for the preferred alternative still total 69,471 linear feet, or about 13 miles of stream, up a substantial 32,076 linear feet from the earlier estimate. Although some legal ditches/regulated legal drains have been substantially modified by drainage activities and degraded as natural systems, stream quality should not be inferred from this designation, alone, (page 7-28) since some native water bodies have this legal status in Indiana.

**Recommendation:** EPA recommends the folded diamond interchange (the DEIS preferred alternative interchange option subsection B-7) for the South Davies Interchange to slightly reduce stream impacts to Veale Creek.

**Stream restoration:** Page 5-333 relates a conceptual approach to stream restoration that includes important principles.

**Recommendation:** We strongly recommend that stream mitigation be calculated on a linear foot basis rather than an acreage basis, as consistent with the current practice of the Louisville District of the Corps of Engineers and the Indiana Department of Environmental Management.

**Recommendation:** Due to the substantial increase in the amount of streams impacts, we continue to recommend that INDOT consider and commit to bridging more streams and their 100-year floodplains, where feasible, and commit to restoring/enhancing the length of each stream and riparian habitat within the right of way.

**Wetland Delineation:** The formal wetland delineation will be conducted after the DEIS, on the preferred alternative, as part of the U.S. Army Corps of Engineers (USACE), Clean Water Act (CWA), Section 404 application. This will likely refine the exact amount of wetland area impacted, up or down from the estimated 27.46 acres, based on the detailed information derived from on-the-ground wetland delineation. This information will be carried into the Section 404 permit / 401 water quality certification processes. The approach taken here is acceptable to EPA for DEIS purposes, recognizing that the numbers will likely change for the FEIS as a result of the delineation.

**Recommendation:** The crossing of the East Fork of the White River has no identified wetland impacts so far, but should be checked during the delineation work, since the crossing includes considerable floodplain areas.

**Wetland W-17:** Wetland W-17 is a “red flag” area of 3.13 acres; from the assessment material in the appendix, this is highlighted because of rare species issues. We defer to the expertise of the Indiana Department of Natural Resources on addressing this specific impact. However, this wetland location is included in the area that would be bridged for the Patoka River crossing, which should help to reduce adverse impacts.

**Recommendations:** We recommend the following clarifications for the Section 2 FEIS.

- In Section 5.23.2, please indicate which water bodies are Section 10 permit waters, such as the White River.
- At the end of Section 5.23.2, and in Section 5.23.4, an additional step that should be added is that EPA reviews the jurisdictional determinations made by the USACE under our Clean Water Act authority.
- In Section 5.23.3, please clarify that EPA has no oversight of Section 401 water quality certifications for states; the certifications are undertaken by a state to ensure that the Federal permit does not adversely impact state water quality.
- In Section 5.24 on page 5-02, which discusses the National Pollutant Discharge Elimination System (NPDES), please explain that the permit program has been delegated to Indiana.

## **MITIGATION**

### **Combined Mitigation Sites for Wetlands, Streams, Forest and Endangered Species:**

Combined mitigation sites for wetlands, stream, forest and endangered species purposes have been identified in separate planning documents and are suitable at the conceptual level for the DEIS. This analysis was based on the earlier under-estimation of stream resources in the project area. The combined mitigation sites appear to be able to produce much of the quantity and quality of mitigation to offset the wetland and a limited amount of the stream losses (about 1600 linear feet of stream channel with small catchment areas) for Section 404 permitting purposes. FHWA/INDOT have proposed that this be set up as a mitigation bank, so that work can begin in advance of the project. The Section 404 mitigation bank Interagency Review Team for Indiana is considering the technical proposal for this work, and the sites appear promising. Additional acres of wetland restoration will likely need to be provided for the 404 permit, depending on the projected and achieved yield of the mitigation sites and the final number of acres of wetland loss

permitted. Likewise, additional stream mitigation will be needed, through on-site riparian treatment of the stream system (see item below), and by restoring ditched or relocated stream channels. Progress toward providing compensatory mitigation is appropriate for the DEIS stage of the process, but work should be ongoing to provide additional mitigation for the permitting stage of the project.

Effective approaches to the future design of stream channels, bank stabilization and the riparian buffer zone within the project right-of-way will be extremely important for the stream resource's structure, water quality and aquatic habitat. This is discussed in the DEIS. Consideration should be given to the use of lower maintenance (e.g., less mowing) species native to southwestern Indiana for planting the riparian buffer zone and contributing to its ecological quality. Culvert design should be planned to promote the maintenance of aquatic communities and wildlife movement.

The impaired waters identified in the project study area reflect problems incurred from mining and agricultural land uses. The activities proposed should not worsen these specific impairments.

Recommendation: The Section 2 FEIS should discuss the status of the Section 2 and Section 3 Umbrella Mitigation Bank instrument and the outcome or status of INDOT's efforts to located additional mitigation sites to compensate for wetlands, streams and upland forest impacts that were not covered by the draft bank instrument at the time of the release of the Section 2 DEIS.

Recommendation: We request that the Section 2 FEIS identify the upland forest mitigation sites that will be used to mitigate for Section 2 upland forest impacts.

**Section 7, Threatened and Endangered Species Act:** The DEIS identifies that the U.S. Fish and Wildlife Service (USFWS) will issue a Biological Opinion (BO) for Section 2 prior to issuance of the Tier 2 Section 2 FEIS.

Recommendation: We recommend the USFWS Section 2 BO be included in the FEIS and the FEIS identify and discuss any changes that need to be made to the current proposal based on USFWS requirements identified in the Section 2 BO.

**Tracking Project-wide Impacts and Mitigation:** DEIS Section 7.3 – Section 2 Mitigation Measures and Commitments (page 7-12) briefly mentions that INDOT will track mitigation commitments and mitigation activities associated with each resource category within a GIS database and spreadsheets. Details of INDOT's tracking system are not provided. The DEIS identifies that INDOT will provide to permitting agencies and EPA a tracking summary on an annual basis.

Recommendation: We request that the FEIS for Section 2 explain the method that INDOT proposes to use to keep track of the direct impacts to the resources of concern and impacts mitigation for each I-69 Tier 2 Section. The FEIS should explain how NEPA-identified mitigation commitments for resources impacts that are not part of regulatory mitigation requirements, such as upland forest, will be tracked to insure that

adequate mitigation occurs for all losses incurred to these resources in each Tier 2 section and throughout the entire I-69 (Indianapolis to Evansville) project.

Recommendation: EPA recommends the FEIS identifies how local communities, watershed groups and others, beside the resource agencies, may obtain updates regarding the I-69 impacts/mitigation tracking information.

Recommendation: We also recommend the Section 2 FEIS and all future I-69 Tier 2 EISs include the pertinent resources mitigation information to-date from the tracking system. This information could be included in the cumulative impacts analysis section of the EIS and/or in the FEIS Appendices that contains the running tally of the overall I-69 Indianapolis to Evansville project impacts.

**I-69 Community Planning Process:** We appreciate that Appendix Q of the DEIS provides an update regarding the measures that the local communities and counties that participate in the I-69 Community Planning Process (CPP) have and/or propose to undertake, if any, in order to protect and enhance these resources of concern in their local community and/or county. We commend FHWA and INDOT for undertaking this endeavor to help mitigate for secondary development impacts associated with the overall I-69 project. The CCP has the potential to result in local communities providing additional protection to resources of concern in the study area.

Recommendation: We request the Section 2 FEIS provide an update on the status of the I-69 CCP and identify any additional community actions that have taken place since the DEIS report.

**Wildlife Crossings, Streams, Floodplain/Riparian Habitat:** We concur with INDOT's commitment to include four wildlife crossings in Section 2: (1) Patoka River, (2) Flat Creek, (3) East Fork of the White River, and (4) a tributary to Jackson Pond. We note that wildlife crossings will automatically be created at the Patoka River and Flat Creek crossings because INDOT has committed to bridging across these water bodies and their 100-year floodplain.

Recommendation: We encourage INDOT to bridge across all streams and their associated floodplains/riparian habitat, when feasible. Bridging these areas would allow for stream and riparian habitat restoration and/or enhancement within the right of way, and automatically provide a wildlife crossing. This would allow for future restoration and/or enhancement of the stream and riparian habitat located outside the immediate right of way by private property owners, watershed groups, local communities, county, state and/or federal agencies.

## **DOCUMENT CLARITY – ERRATA: FIGURES/MAPS, TABLES, DEFINITIONS**

### **Tier 2 Section 2 DEIS - VOLUME I**

#### **Chapter 3 – Alternatives**



**Page 3-5 (footnote).** Please be advised there is no Table 3-16 as stated in the footnote. In addition, Table 3-15 Preliminary Alternatives – Estimates of Annual Maintenance Costs (page 3-104) does not include all the cost information that the footnote claims it does.

**Page 3-13.** Please change “USEPA District 5” to “USEPA Region 5.”

#### Chapter 4 – Affected Environment

**Table 4.2-14** (page 4-21) does not show future population projections for the three counties as stated on page 4-18. It shows a Summary of Existing Land Uses. Table 4.2-13 (page 4-18) shows population projections.

**On Page 4-59** the reader is incorrectly referred to Page 4-67 to find Figure 4.3-1. The correct page is 4-66. Also, **Figure 4.3-2** is on page 4-67 and not on page 4-68.

**Page 4-63** incorrectly refers the reader to page 4-69 for Figure 4.3-3. Figure 4.3-3 is on page 4-68.

#### Chapter 5 – Environmental Consequences

**Page 5-134** – Figure 8-1 is not an aerial photo as stated here. Did you mean Figure 8-2?

**Table 5.19-2 Wetland Impacts Matrix for Section 2 Alternatives (pages 5-315 through 5-321).** This Table includes an Indiana [wetland] community type abbreviated as “SF.” If this is not a typo, please identify the wetland community “SF” stands for at the end of Table 5.19-2.

**Table 5.19-9 Floodplain Impacts by Alternative (page 5-329).** The floodplain acreage impacts for Alternatives A and B (113.59 acres and 112.10 acres, respectively) identified in this table do not coincide with the impacts acreage identified for Alternatives A and B (109.8 acres and 105.4 acres, respectively) in the text on page 5-329.

**Page 5-330 incorrectly refers the reader to Table 5.24-2 (page 5-395) and Figure 5.24-1 (page 5-428)** for information regarding Section 2 impaired streams. Table 5.24-2 presents information regarding Land Cover Types in Induced Growth TAZs and Figure 5.24-1 shows locations of projected Induced Growth areas. We recommend the FEIS includes the Figure that depicts and labels all impaired stream segments within the Section 2 study area and Section 2 corridor.

**On Page 5-417** (first full sentence) there appears to be a math or typo error here regarding the amount of total acres of agricultural land contained within the three-county area, and consequently an error in the percentage of land reported here that would be converted from agricultural land due to the project. See page 5-426 (first full paragraph) for contradictory acreage/percentage figures.

#### Chapter 13 Glossary, Acronyms and Index

We recommend that **Community Planning Program (CPP)** be added to the FEIS index, and the FEIS list of acronyms include **CCP**.



We recommend that both **Direct Impacts** and **Induced Growth** be included in the FEIS index.

**Tier 2 Section 2 DEIS - VOLUME II – Appendices** (on Compact Disk only)

We recommend that all Community Advisory Committee (CAC) meeting minutes, phone calls and other documentation the FHWA/INDOT/consultant's used to help inform their EIS decision making process be included as part of the NEPA record in an FEIS Appendix.